REMARKS/ARGUMENTS

PART I - INTRODUCTION

Status

This Response is filed in response to the Office Action dated June 25, 2007. In that Office Action, claims 1-58 were indicted as pending. Claims 1-58 were rejected on various grounds, including:

1. Claims rejected under 35 U.S.C. §112
    - Claims 1-13 were rejected based on ambiguity in claim 1;
    - Claim 14 -22 were rejected based on an ambiguity regarding the "host software" limitation in claim 14;
    - Claim 37 was rejected for lack of antecedent basis for "the database" limitation; and
    - Claim 41 was rejected for lack of antecedent basis for "the protocol file" limitation.
2. Claims rejected under 35 U.S.C §102

    Claims 49 and 50 were alleged to be anticipated by *Hellerstein* (U.S. Patent 7,013,461).
3. Claims rejected under 35 U.S.C. §103

    Claims 1-22, 26, 31-40 and 58 were as being obvious in light of *Hellerstein* in view of *Ma* ("Framework for Third Party Testing of Component Software).

    Claims 23-25, 27-36, and 41-48 were rejected as being obvious in light of *Hellerstein*.

Interview

Applicant thanks Examiner Nguyen and his supervisor, Examine Zhen, for the time spent during a telephonic interview involving the undersigned, on August 8, 2007, in which an

overview of the invention was discussed with respect to the prior art, no specific claims were discussed, and no agreement was reached. Applicant further notes that the Examiner agreed to provide the interview summary for the record.

As Applicant noted in the interview, the present application is related to various other pending applications as noted in the initial paragraph as previously amended of the specification, although the scope of the claims are distinct. Applicant notes that the specification has been previously amended to reflect that one related application matured into Patent No. 7,194,756. Applicant has previously submitted an IDS of pertinent prior art from that application, and cites in an IDS filed herewith other prior art and a copy of the Office Actions, for purposes of meeting Applicant's duty of full candor in prosecuting the present application.

PART II - REBUTTAL TO "RESPONSE TO ARGUMENTS"

Applicant reiterates that *Hellerstein* does not disclose the SDS storing information regarding a particular target system, specifically, "*Hellerstein* is void of any disclosure of maintaining information about a target's (e.g., host) manufacturer and model." (Page 19 of prior response).

In the Office Action, the Examiner stated:

> Examiner in his previous action pointed out some locations in *Hellerstein* that are relevant to the limitation in the instant application. *Hellerstein* discloses (col. 5, lines 25-28 "A global software package repository 206 is used as follows. Once a new software package and its description are received, the package is stored in this archive and is then available.") *Hellerstein* further discloses (see at least col. 7, lines 60-62 "description file (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list.) One of ordinary skill in the art can recognize that the description file contains information about a particular target machine.

Applicant submits that the above text referenced in *Hellerstein,* specifically the "description file"

stored in the SDS does not recite information about a particular host manufacturer and host. A simple example will illustrate the deficiency of the argument.

Consider the following example: an individual has a software program on their personal computer; the software program can be described using the attributes of the "description file" referenced in *Hellerstein* above.

Service: word processing program

Role: Stand-alone application (see, e.g., *Hellerstein* col. 6, line 45)

Software Name: WORD®

Version: Microsoft Office 2003

Resource Pre-requisite list: greater than 10Mb memory

Service Pre-requisite list: Microsoft Windows 2000 Operating System

Applicant respectfully asks whether it is possible to identify what is the make and model of the personal computer running the program. Applicant notes that it ***is not possible to identify the make and model of the computer based on this information***. The software description file indicates requirements for running the software, not the actual configuration of the computer.

Applicant repeats the assertion the SDS does not indicate via the description file what is the make and model of the computer and this cannot be determined from the "description file" disclosed in *Hellerstein*. *Hellerstein* clearly indicates the "description file" describes the software, not the target machine. The Office Action further states that:

> SDS is using the description file to prepare a package that is suitable for target machine in that region (see col. 8, lines 25-27). Another words, [sic] SDS generates a software package for a particular target machine that fits the description file. For example a target machine that has enough resources (e.g., CPU, memory, disk, TCP, DNS, etc.) for running the software package. Each machine has different kind of CPU, different amount of memory, disk and so

> forth, depending on the manufacturer and model of the machine.

Applicant submits that it is well known that commercial software programs are readily available for purchase at retail stores and indicate on the package the system requirements to run the software (e.g., a certain amount of memory, processor speed, Internet connection required, etc.). Again, this does not indicate the computer make and model that the software is running on.

While it is true that *Hellerstein* states in col. 8, lines 25-27, that the "SDS prepares a package based on dependency requirements, that is suitable for target machines in the region", that does not mean the SDS knows the make and model of the machine. Rather, this should be interpreted in light of the Abstract, which clearly states that "a base software package is prepared for each of one of more of the regions…" and that "the base software packaged received at each of the candidate region is then customized based on at least one of… individual target machine configuration information." Thus, the software sent by the SDS to the RS is customized by the RS. This means the SDS sends software to the RS which *is not customized based* on the individual target machine configuration.

The Office Action further states:

> Even if the global software package repository 206 does not maintain information about a particular target system[,] One of ordinary skill in the art can configure this global software package repository to maintain (store) such information for a particular target machine.

Applicant submits that the test is not whether one of ordinary skill in the art can configure the repository to store this information. (See, e.g., MPEP 2143.01 IV entitled "Fact That The Claimed Invention Is Within The Capabilities Of One Of Ordindary Skill In The Art Is Not Sufficient By Itself To Establish Prima Facie Obviousness").

Further, Applicant notes that *Hellerstein* teaches away from the SDS maintaining such information, since *Hellerstein* touts the advantages of a decentralized methodology using a tiered approach for distributing software, namely one in which the SDS does not maintain information

about each target machine. If the functionality of the RS and SDS are collapsed into one server, this would negate the purpose and advantages of *Hellerstein*.

Finally, the Office Action states:

> Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111[R-1] Interpretation of Claims- Broadest Reasonable Interpretation. During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.'

Applicant accepts such basis of claim examination as proper procedure. However, as will be seen herein, many claims recite limitation such as "a specific host manufacturer and a model associated with the specific host manufacturer." Applicant submits given the broadest interpretation of these claim limitations, they are still not found in the disclosure of *Hellerstein*, which discloses a software description file. The broadest interpretation of a "host manufacturer" does not encompass a manufacturer of a software package, since a software package is not a "host" and a software package manufacturer is not a host manufacturer. Similarly, the broadest interpretation of a "host model" does not encompass a software package version, since a "host model" is not a software package.

Applicant respectfully submits that *Hellerstein* does not disclose the SDS maintaining information about a target's particular "host manufacturer and host model." In fact, Applicant submits that *Hellerstein teaches away* from the use of a host type, as well as storing a particular host's make/model information to determine compatibility.

Consider the following question – why do software manufacturers indicate the system requirements on software packages being sold or licensed in retail stores (a form of distribution)? manufacturers indicate the system requirements to facilitate compatibility with the target machine. Thus, a software package will indicate what operating system it is compatible with, what processor speed is recommended, minimal memory and disk storage requirements, etc.

This raises a second question – why don't software manufacturers simply indicate that

the software is compatible with the "ACME Computer Corporation, Model 7000" (to pick a fictitious manufacturer and model thereof)? After all, many consumer purchasers of software do not readily know the processor, memory configuration, of the computers they own. As a consumer, would it not be simpler to form them to simply identify the make and model of their computer and match that up with the compatibility information on the package? There are a couple of reasons why this approach would not work.

First, looking at the universe of computer manufacturers and models they offer, it is clear that there are hundreds thereof. Each of these would have to be indicated on the package. As time progresses and new computer models are introduced, the packaging rapidly becomes obsolete. While that may be simple for the consumer to understand and ascertain compatibility, it is not very effective for the software manufacturer as it is very difficult to keep up with the various computer makes and models, as well as having to update the information on the software packages.

A footnote on the above, would it be reasonable to expect the software manufacturer to test their software on each and every model in existence? No, that is not reasonable because there are hundreds of current models, even more obsolete models, and new models introduced every day. Thus, it is not standard practice for a software manufacture to certify their software on each specific make and model of a computer.

Second, users may modify their computers. Memory may be increased after the computer is purchased by the user, and hard disks may be replaced with greater capacity drives. Merely indicating a software program will work on the 'BRAND X' computer may not give an accurate picture of whether the software is compatible.

Consequently, listing the make and model of every computer that a software package is compatible with is not a viable solution for distributing software to computers in the retail market. Rather, software manufacturers merely list system requirements, without indicating particular computer manufacturers and models. In fact, the Examiner has not denied that merely knowing the software program and its system requirements does not identify the particular computer being used.

Thus, the system disclosed in *Hellerstein* uses information about a software package's system requirements, and the environment of a target machine to ascertain compatibility without having to maintain specific manufacturer make and model information about each computer. *In fact, one can argue that Hellerstein uses this approach so as to avoid having to* maintain *specific manufacturer make and mode information for every computer that could receive the software.*

In one embodiment of the present invention, information is maintained about host types, including host manufacturer and models. Because hosts on cable networks are presently not upgradeable by users (or in a very limited manner and certainly not to the same extent as computers can be upgraded), *the environment disclosed in Hellerstein is not the same* environment with respect to hosts on a cable network. Consequently, the solution disclosed in *Hellerstein* for solving a software distribution problem is a different problem than addressed by the present invention.

This illustrates a fundamental distinction of the problem and the solution. The above examples illustrate a fundamental distinction between distributing software programs to general purpose computers on a computer network, versus distributing host files to hosts on a cable network. What is impractical or undesirable in one environment may be possible and desirable in another. With this in mind, some of the distinctions between the recited claims and the disclosure in *Hellerstein* are readily discernable.

PART III - CLAIM REJECTIONS UNDER 35 U.S.C. §112

Claim 1

The Examiner has alleged the limitation of "a data processing system" is not clear, as it "unclear to the Examiner whether this data processing system is the certification entity or the software manufacturer of another entity."

Applicant responds that it could be either the certification entity, the software manufacturer, or another entity. As disclosed in paragraph 227, the software manufacturer may submit the file to the Host File Database, or an authorized software vendor for the host

manufacturer may do so. Alternatively, "the manufacturer may rely on the certifying entity to release the software to the HFD." (Id.) The limitation of a "data processing system" is intended to be broad enough to encompass any of these embodiments. Applicant submits that in this context, any confusion regarding the claim term is clarified, and that support is found in the specification.

The Office Action also alleges "[t]here is no connection between 'software manufacturer', 'certification entity', and 'processing system'." Applicant has amended the claims, and submits the amendments clarify the connection thereof.

Applicant submits that any deficiency under 35 U.S.C. 112 has been corrected and/or explained, and that the rejection based on 35 U.S.C. 112 for claim 1, and depending claims 2-13 be withdrawn.

Claim 14

The Office Action indicated "[i]t is unclear to Examiner whether the 'host software' is the host software from the software manufacturer of from the certification entity or new host software from the first data processing system."

The host software is initially generated by the host software manufacturer, it is then provided and certified by the certification entity, and the host software is then stored in the HFD database. Either the host software manufacturer or the certification entity can load the software into the HFD (see, e.g., par. 227 of the specification).

Applicant has amended claim 14 to clarify this aspect, and further connects the two parts of the claim with the amendment "establishing a connection from a first data processing system operated either by the host software manufacturer or the certification entity to a second data processing system."

Applicant thanks the Examiner for his careful review and believes the amended text alleviates any confusion. Applicant respectfully requests the rejection based on 35 U.S.C. 112 of claim 14, and dependent claims 15-20 and 22 be withdrawn (claim 21 has been also incorporated into claim 14, and therefore cancelled, so that the rejection for claim 21 is now moot).

Claim 37

Applicant has amended claim 37 to clarify the limitation "the host file database." Applicant thanks the Examiner for his careful review and believes the amended text alleviates any confusion. Applicant respectfully requests the rejection based on 35 U.S.C. 112 of claim 37 be withdrawn.

Claim 41

Applicant has amended claim 41 to clarify the limitation "the protocol file." Applicant thanks the Examiner for his careful review and believes the amended text alleviates any confusion. Applicant respectfully requests the rejection based on 35 U.S.C. 112 of claim 41 be withdrawn.

PART IV - CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claim 49

Applicant submits that *Hellerstein* does not anticipate nor suggest the limitation:

"the data processing system comprising a database capable of receiving and storing the host software file and maintaining an association of the host software file with a host manufacturer, the database further maintaining an association of the host software file with a specific host model of the host manufacturer."

The Office Action alleges that this limitation is disclosed in *Hellerstein* by the following language:

see at least col. 5, lines 25-28 "A global software package repository 206 is used as follows. Once a new software package and its description are received, the

> package is stored in this archive and is then available"; also see at least col. 7, lines 60-62 "description file (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list)" – This indicates that the global software package repository 206 is maintained (stored) information for a particular target (e.g., service, role, resource pre-requisite...))

Applicant reiterates that the 'description file' maintains information about the software on the target machine, not the actual machine's configuration, such as manufacturer and model. There is no text indicating "manufacturer" or "model" in *Hellerstein*, and this is not suggested by the phase "service, role, software name, version, resource pre-requisite list, service pre-requisite list." Applicant notes that the words cited state "software package and ***its*** description…" The description is of the software package, not of the machine.

Applicant further submits that *Hellerstein* does not teach or suggest the limitation "the database storing a certification file associated with the host software file."

The Office Action alleges that this is disclosed in *Hellerstein* because "the 'description file' is considered at [sic] certification file associated with software package."

Applicant interprets the Examiner's reasoning that the "description file" is considered by itself a certification file for the software package. This logic is unclear, since the description file describes attributes of the software, such as "service, role, software name, version, resource pre-requisite list, service pre-requisite list", none of which describe or suggest a "certification file." If the rejection is maintained on this point, Applicant requests further specifics as to which attribute the Examiner considers to be a "certification file" in order to provide a complete response.

Applicant notes the limitation recites "a certification file," and the "description file" of *Hellerstein* is not the same thing. Applicant notes that these terms are not commonly interpreted as the same by those skilled in the art. If the rejection is maintained on this point, Applicant requests some further basis for equating "certification" with "description."

In addition, *Hellerstein* implies that the description file, which contains pre-requisites, is

used merely to formulate a basic software package ("The base package preparer operation 502 receives as input the global policy data 510 indicating which regions are candidates for upgrade, the basic dependency information 506 indicating the pre-requisites, ex-requisites and co-requisites for the service package, and the configuration information 508 for each of the regional servers representing the candidate regions. Using this information, the base package preparer operation 502 constructs a base service package for each of the regions 512, 514 and 516. Col. 7, lines 30-39). This does not suggest "certification" at all. If the rejection is maintained on this point, Applicant requests some further elaboration on this point.

Applicant submits that *Hellerstein* does not anticipate all the limitations of claim 49, and therefore, claim 49 is patentable over *Hellerstein*. Applicant respectfully requests the Examiner to withdraw the rejection and allow claim 49.

Claim 50

Claim 50 incorporates the limitations of claim 49, and therefore is patentable for the reasons identified above over *Hellerstein*.

PART V - CLAIM REJECTIONS UNDER 35 U.S.C. §103

This section deals with the claims largely in numerical order, regardless of whether they are obvious in light of *Hellerstein*, or *Hellerstein* combined with another reference(s).

Claims 1 and 2

Applicant has amended claim 1 to incorporate the limitations of claim 2 therein. Consequently, claim 1 now recites "a host associated with a specific host manufacturer and a model associated with the specific host manufacturer." As such, Applicant addresses the rejection of claim 2, as the rejection for claim 1 is now moot.

Claim 2 is alleged to be obvious in light of the combination of *Hellerstein* and *Ma*, and

states that:

> "Each created software package is for a specific machine (model) that has an appropriate amount of resource. Therefore, third-party testing certifies a software package for execution on a specific target machine).

Applicant submits that the conclusion is incorrect. First, the statement that "each created software package is for a specific machine (model) that has an appropriate amount of resource" is not found in *Hellerstein*. *Hellerstein* discloses that the software packages distributed are for a target installation environment, not for a particular manufacturer's make and model of a machine. ("The output is a set of customized packages 530 that is produced for each group of machines within the region, having the same installation environment." Col. 7, lines 50-54.) Applicant presumes that this means, if the machines have the same operating system, minimum memory, minimum disk space, etc., then they are the "same installation environment", but not necessarily the same make and model.

Second, the statement "therefore, third party testing certifies a software package for execution on a specific target machine" is nowhere to be found in the *Ma* reference. Indeed, that is why it is a conclusion prefaced by "therefore" (because it is not explicitly found in the *Ma* reference).

Because neither *Ma* nor *Hellerstein* teach or suggest certifying software on a specific host brand and model, and further because the supposition on which the conclusion is drawn is incorrect, the allegation that the references render obvious the claimed limitation must fail. The combination of references simply does not teach or suggest all the claimed limitations.

Applicant submits that claim 1 in its amended form is now allowable, and respectfully requests that the rejection be withdrawn and the claim be allowed.

Claims 3, 4, and 5

Claims 3, 4, and 5 incorporate the limitations of claim 1, and therefore are patentable for the reasons identified above over *Hellerstein*.

Claim 6

Claim 6 has been amended to recite "wherein the host software includes a host profile file indicating one of a plurality of resources incorporated in the host, wherein at least one of the resources processes digital video signals." This clarifies that for this claim, a host profile file is involved.

The Office Action alleges that *Hellerstein* discloses a "description file (e.g., resource prerequisites…" and that "one of ordinary skill in the art would recognize that CPU can process digital video signals."

Applicant submits that a conclusionary leap is being made, since it is not clear that the "resource prerequisites" for software packages in *Hellerstein* would involve a CPU that can process digital video signals. *Hellerstein* discloses software distribution to computers including laptop and desktop computers (see, fig. 2, col. 1, line 9, 67). It is not clear that based on the filing date (Jan 2001) that CPU of such computers were capable of processing video signals. Applicant notes that based on the Examiner's response, it is alleged that a CPU in a computer of *Hellerstein*'s disclosure would process "video signals." This is actually not disclosed, and Applicant submits it is not common even today. Applicant notes that this limitation is not the same as receiving digital data which the processor then generates a video signal therefrom (this function is well known in computers). Hence, this limitation should be distinguished from a resource capable of processing a digital video signal.

Applicant submits that this is not a fact that one of ordinary skill in the art would recognize, because computers as suggested in *Hellerstein* were not capable of processing digital video signals, and even if so, this contradicts the guidelines of the MPEP (see, e.g., MPEP 2143.01 IV entitled "Fact That The Claimed Invention Is Within The Capabilities Of One Of Ordinary Skill In The Art Is Not Sufficient By Itself To Establish Prima Facie Obviousness").

Further, claim 6 now recites "wherein the host software includes a host profile file indicating one of plurality of resources incorporated in the host" which is not disclosed by

Hellerstein. *Hellerstein* disclosed a software description file which indicates the pre-requisites required. The 'description file' is analogous to a package of software indicating that it requires a certain minimal level of resources (e.g., monitor, printer, or Internet connection). *Such a file does not define the characteristics of the host itself.* In contrast, the "host profile file" is a file which "describes the capabilities of the specific type of host." (Par. 122.) There is no analogy of a file in *Hellerstein* that is transmitted that discloses actual capabilities of a specific type of target machine. Recall that the description file is a description of the software package, not the target machine. Further, the minimum requirements to execute a software package does not indicate the actual level of requirements present on the machine.

Consequently, Applicant submits that at least for these reasons, in addition to depending from claim 1, that claim 6 is patentable over the combination of *Hellerstein* and *Ma*.

Claim 7

Claim 7 recites: "wherein the host profile file…." Applicant notes that *Hellerstein* does not disclose a "host profile file".

The Office Action states "One of ordinary skill in the art would have been motivated to create a user interface based on the description file because it allows user/administrator to select the services, resources and version of software package for specific target machine."

Applicant submits that this contradicts the teaching of *Hellerstein*, which states a broad characterization of the invention as follows:

> the invention is more generally applicable to any computing environment with individual computing devices in which it is desirable to provide automatic software distribution based on the role and the service associated with a software package *rather than relying upon an administrator (as in the conventional push-based approach) or a user of the target machine* (as in the conventional pull-based approach) to determine whether the target *machine* needs to be updated. (Col. 4, lines 17-25, emphasis added)

Hellerstein teaches an automatic approach of distributing software, instead of one involving an

administrator or a user. Thus, there is no motivation in *Hellerstein* to create a user interface that is not already disclosed therein, when that is not a goal of Hellerstein.

Further, as noted above, the host profile indicates a description of the capabilities of a specific host. The Examiner noted himself in rejecting claim 5 by quoting *Hellerstein* that it discloses downloading software, which is a "software package 201 is a unit of physical containment for a collection of software components forming a service or an end-user application." A software component forming a service or end–user application is not a file describing the capabilities of the target machine.

Consequently, for these reasons, and for the reasons that claim 7 ultimately depends on claim 1, claim 7 is patentable over the combination of *Hellerstein* and *Ma*, and it is respectfully requested that the rejection be withdrawn.

Claims 8 -13

Claims 8 -13 incorporate the limitations of claim 1, and therefore are patentable for the reasons identified above over *Hellerstein*.

Claim 14

Applicant submits that claim 14 is not anticipated by *Hellerstein* (by itself or in combination with *Ma*), as claim 14 recites "the host software comprising a host protocol file and a host profile file." There is no disclosure in *Hellerstein* of transferring a copy of "a host protocol file and a host profile file."

First, Applicant reiterates the Examiner's prior rejection of claim 5 wherein the software downloaded in *Hellerstein* was application software, forming a service or end-user application. In this embodiment of the invention, the host software transferred comprises two files – "a host protocol file and a host profile file." *Hellerstein* does not disclose downloading two files.

Further, *Hellerstein* does not disclose a "host protocol file" or a "host profile file."

Applicant has previously discussed the "host profile file" and will address the "host protocol file" limitation. As found in the specification, (see fig. 28 and par. 71), the host protocol file "provides protocol messages for configuring the host." This is not an application software package forming a "service" or "end-user application" as taught by *Hellerstein*. Applicant submits that *Hellerstein* is void of the concept of sending messages for configuring target machines.

Consequently, *Hellerstein* does not disclose at least these limitations, and therefore claim 14 is patentable over the combination of *Hellerstein* and *Ma*.

Claim 15

Applicant reiterates the arguments proffered in the last office action, as the present response has not addressed those points. Applicant adds that whatever is meant by the cryptic phrase in *Hellerstein*, it is clear that because the message content refers to the "flag" this is something maintained in the RS (see, e.g., col. 8, lines 43-51). The message appears to pertain to communication between the SDS and RS, not the host.

Further, applicant adds that even if the message were transmitted to the host, nothing indicates any corresponding to a host protocol file.

Claim 16

Applicant reiterates the arguments proffered in the last office action, and notes that none of the terms, which *are descriptions of the software file* pertain to capabilities of a target machine, which the Examiner analogizes to a host. Applicant maintains:

1) a service name of a software package does not disclose a host manufacturer and model associated with the specific host manufacturer;

2) a role (e.g., client, server, standalone) indication of a software package does not disclose a host manufacturer and model associated with the specific host manufacturer;

3) a software name of a software package does not disclose a host manufacturer and model associated with the specific host manufacturer;

4) a version number of a software package does not disclose a host manufacturer and model associated with the specific host manufacturer;

5) a resource pre-requisite of a software package does not disclose a host manufacturer and model associated with the specific host manufacturer; and

6) a service pre-requisite list does not disclose a host manufacturer and model associated with the specific host manufacturer.

Claim 17

Applicant reiterates the comments from the prior response, namely that a "host protocol file" (which the version number refers to) is not disclosed in *Hellerstein*. Namely, *Hellerstein* clearly discloses a "version" of a software package, which the Examiner has recognized in rejecting claim 5, is a "service" or an "end-user application." The present invention embodies various forms of host software, one of which is a host protocol file. This aspect of the present invention in claim 17 cannot be simply read out.

Applicant submits that claim 17 is patentable over *Hellerstein* for the above reasons that the rejection be withdrawn, and claim 17 be allowed.

Claim 18

Applicant reiterates the comments provided with respect to claim 2. Namely, that there is not indication in *Hellerstein* that the *Ma* suggests that the testing is performed based on a specific host make/model.

Claim 19

Applicant submits that *Hellerstein* and *Ma* do not render obvious claim 19, since claim 19 recites recording "the certification indication." The Examiner alleges that this is anticipated or obvious in light of "each package is presumed to be accompanied information listing the service software and hardware dependencies of the package."

Applicant notes that anyone purchasing software will observe the package indicates information of the service software (e.g., operating system) and hardware dependencies (e.g., memory and/or processor requirements). Applicant does not understand how this information would indicate that the software has been certified as being operable on a host. As noted in *Ma*, "it is possible for a component developer to overstate the quality of components." If the mere indication of the requirements for software were certification that it operated properly, Applicant would question why software manufacturers release new software versions to correct bugs?

Claims 20 and 21

Claims 20 and 21 are patentable for depending on claim 14, which is patentable over the combination of *Hellerstein* and *Ma*.

Claim 22

Applicant reiterates the response provided in the prior office action, and notes that the Examiner has not provided any basis in the text for the assertion, or otherwise responded to Applicant's reasoning.

Applicant submits that transferring the software and *"its description file"* does not inherently indicate certification. Applicant requests the examiner to elaborate on what specific aspect discloses or renders obvious this limitation, or otherwise withdraw the rejection.

Claim 23

Claim 23 has been amended to incorporate the limitations of claim 30 therein. Consequently, the rejection for claim 23 is moot, and Applicant will address the rejection for claim 30.

Claim 30, which recited "wherein the host software file contains messages for interacting with a host associated with a specific host manufacturer and a model of the specific host manufacturer", is alleged to be disclosed by the following text:

"message content may include: service name, package name, 'override' flag, package binary. (col. 8, lines 28-29).

Applicant reiterates the points in the last office action, and notes that none of these disclose or suggest a "specific host manufacturer and a model of the specific host manufacturer." Applicant requests further elaboration as to which term is alleged to disclose this e.g., the phrase "service name", "package name", " 'override' flag", or "package binary."

Further, even if one of the above phrases would allege to disclose a specific manufacturer make and mode of a host, *Hellerstein* discloses that the information above appears to be between the SDS and RS, not information which is sent to the host. Still further, the information sent to a host as recognized by the Examiner is a "service" or "end-user application", which is not "messages for interacting with a host".

Consequently, Applicant submits the rejection should be withdrawn and claim 23 be allowed, as *Hellerstein* does not disclose the recited limitations.

Claim 24

Claim 24 is patentable for depending on claim 23, which is itself patentable over the prior art.

Claim 25

Claim 25 is cancelled, rending the rejection moot.

Claim 26

Claim 26 recites in part "verifying in the enhanced services system that the indication of certification has been received prior to transmitting a copy of the host software to the host."

The Office Action states "*Hellerstein* in combination with *Ma* further disclose the above limitations." Applicant does not find where either *Ma* or *Hellerstein* teach or suggest that the indication of certification be received prior to transmitting a copy of the host software to the host. Applicant requests further elaboration where this can be found in *Hellerstein* in combination with *Ma*.

Further, the Office Action claims it would have been obvious in light of the references, because "one would have been motivated to allow third-party certification testing because third-party certification is a safe approach that buyers should trust when dealing with component software."

Applicant notes the operator of the host, e.g., the viewer, is not recited as "buying" the software, and typically does not have control over its download into the host. Consequently, the motivation appears inapplicable to the present invention.

Claim 27

Claim 27 is patentable for depending on claim 23, which is itself patentable over the prior art.

Claim 28

Claim 28 is cancelled, rendering the rejection moot.

Claim 29

Claim 29 is patentable for depending on claim 23, which is itself patentable over the prior art.

Claim 30

Claim 30, which has been incorporated into claim 23, is cancelled, rendering the rejection moot.

Claim 31

Claim 31 has been amended to incorporate claim 34. Therefore, the response herein addresses the rejection of claim 34.

Claim 34 is alleged to be obvious in light of *Hellerstein*. Applicant submits that *Hellerstein* does not disclose "retrieving a file associating an enhances services system with a plurality of host types, each host type comprising a specific host manufacturer identifier and a model identifier associated with the specific host manufacturer."

Applicant reiterates the reasons proffered in the previous response, and notes that the present Office Action merely reiterates the prior Office Action without responding to Applicant's arguments in full. Applicant respectfully requests the next Office Action to respond to each of the Applicant's points of rebuttal.

Applicant reiterates the point that the claims recites that a file is retrieved that "associates an enhanced services system with a plurality of host types" and that a host type comprises a "specific host manufacturer identifier and a model identifier associated with the specific host manufacturer." The Office Action in response alleges this is disclosed by the text in *Hellerstein* stating: "retrieval of target roles" and "role repository 204 maintains information such as service, role, associated software package, and updateable flag."

Applicant submits that the cited text of *Hellerstein* does not disclose this. First, if the enhanced service system ("ESS") is analogized to the regional server ("RS"), then there would

be a file identifying that particular RS with a plurality of host types, comprising a manufacturer identifier and a model identifier. The Office Action alleges that the "role repository 204" contains such a file. This information is alleged to be disclosed as "service, role, associated software package, and updateable flag."

Applicant notes that "service" is illustrated in *Hellerstein*, column 4, lines 60-65, as being of the nature of "database", "web", or "word processing." That does not indicate a manufacturer identifier of a host. The "role" is also shown in the same location in *Hellerstein* as being of the nature of "server", "client", or "standalone." Again, this does not indicate a manufacturer identifier of a host. Associated software package is indicated along the lines as "Apache 1.3.4", "Netscape 4.72", or "Microsoft Word 2000". Again, this does not indicate a manufacture identifier of a host. Finally, the updateable flag, also indicated in the same location in *Hellerstein*, is a yes/no indication. Again, this does not indicate a manufacturer identifier.

Consequently, it does not appear that the role repository information referenced indicated in *Hellerstein* indicates which host types are present in an ESS.

In addition, the Office Action recites that manufacturer identifier and host model identifier is found in the text "each of the end point machines (the potential targets) has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.). Applicant again illustrates the deficiency of this by posing the question: What are the manufacturer identifier and model identifier associated with a host having 10 MB of memory, a Pentium processor, 1Gb of disk space, and 1 MB of swap space? It cannot be answered. While Applicant agrees that different hosts can have different resources, knowing the resources does not identify the host manufacturer and model. Consider the simple possibility of two hosts having the same resources but are manufactured by two separate entities. That by itself shows that the resource listing in *Hellerstein* does not render obvious the claimed limitation.

Further, the limitation "determining if the host type matches one of a plurality of host types" (recall that the host type is a host manufacture identifier and a model identifier) is not rendered obvious by the statement "determines if each of the end point machine (the potential targets) has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.)."

Applicant, again, submits that knowing the processor, memory, available disk space, etc. does **not indicate the type of host**. For example, what is make/model of a computer having a Pentium processor, with 10 MB of memory, 10 GB of disk space, etc.? IT CANNOT BE DETERMINED.

Consequently, Applicant respectfully submits that claim 31, which incorporates claim 34, is patentable over the prior art references of record, and should be allowed.

Claim 32

Claim 32 recites "host protocol file and a host profile file." Applicant directs the Examiner to the prior comments regarding *Hellerstein*'s lack of disclosure regarding these two files. Further, the "description file" cannot be analogized to two files. A single description file is not the same as two files, further in view of the fact that the two files are different.

The Office Action states the "this file [referring to the description file] can be a host profile file." The host profile file indicates the capabilities of the host itself. The text from *Hellerstein* states in full "[a] new SP [software package] … and its description…." The description is a description of the software package. Alleging this describes the target machine is inaccurate. The description of a software package does not describe the machine in which it is executing.

Consequently, Applicant respectfully submits that claim 32, which incorporates the limitations of claim 31, is patentable over the prior art references of record, and should be allowed.

Claim 33

Applicant respectfully submits that claim 33, which incorporates the limitations of claim 31, is patentable over the prior art references of record, and should be allowed.

Claim 34

Claim 34 is cancelled, as it is incorporated into claim 31.

Claim 35

Claim 35 recites in part "wherein the host software file is tested for operation on a specific host manufacturer and host manufacturer's model." The Office Action alleges that this is disclosed by the statement "SDS prepares a package based on dependency requirements, that is suitable for target machines in that region." (Col. 8, lines 25-27.)

Applicant notes that the cited text does not state the packages are tested on specific host manufacturer and host manufacturer's model. Again, an example will illustrate why this does not anticipate the claimed limitation. Suppose a software manufacturer develops software and provides it with an indication that it requires (e.g., the dependency requirements) include 10 MB of RAM and 10GB of free disk space on the computer. Does this inherently imply that the software package was tested on each manufacturer's model of a laptop?

In fact, the Applicant submits that the whole reason why the industry creates software based on a published set of dependency requirements is to **avoid** having to test and certify that the software operates on each and every make and model of computer. The listing of the system requirements is in effect, placing the burden on the user of doing an initial level of 'qualification testing' by comparing the requirements indicated with the software with the requirements present on the user's computer. If the manufacturer simply stated, "This software will work on a WIDGET Model Z computer", there would be no need to identify the memory, processor, and other limitations required.

Consequently, Applicant submits that claim 35 is patentable over the prior art, and that the rejection should be withdrawn.

Claim 36

Claim 36 is argued to be patentable, based in part on incorporating the claim limitations of claim 31, which is patentable over the prior art.

Claim 37

Claim 37 is patentable in part for reciting "a brand and model of a consumer electronics host device to a host file database." Applicant' prior remarks regarding manufacturer and model thereof apply, and are incorporated herein.

Further, the claim also recites "detecting activation of a host." As stated in the specification (Par. 227), ""Host activation" is the process of letting the network know about the presence of the host on the cable plant. This may occur due to power loss at the host, initially connecting a new host, or manually resetting the host by the user." This is alleged to be found in *Hellerstein*, col. 8, lines 31-38, which discloses the RS performing "inventory scan" which comprises determining if the target machine has appropriate resources. Applicant notes that determining whether a target machine has the appropriate resources is not the same as "detecting activation of a host." In fact, *Hellerstein* says nothing about detecting the presence of a host, which is not the same as having an entry in database of the host's software inventory.

Consequently, Applicant submits that claim 37 is patentable over the prior art, and that the rejection should be withdrawn.

Claim 38

Claim 38 recites in part "wherein detecting activation of a host is initiated by the receipt of a message from a host transmitted in a two-way cable network."

This is alleged to be anticipated by *Hellerstein*, but Applicant does not find the recited text in *Hellerstein*, nor does the Applicant find the text in LaJoie et al.

Nevertheless, the recited text states "may be connected to computer system 110 through network 120 and may exchange data, information and instruction with computer system 110."

Applicant notes that it is well known for computers to send messages over communication networks, and that such networks may even involve cable networks. However, in anticipation that the Examiner will find or identify the source of the text, Applicant notes that the "detecting activation of a host is initiated by the receipt of a message from a host" is not the mere sending of a message by a host.

Consequently, Applicant submits that claim 38 is patentable over the prior art, and that the rejection should be withdrawn.

Claims 39 and 40

Claims 39 and 40 are patentable for depending on claim 37, which is patentable over the prior art.

Claim 41

Claim 41 is patentable over *Hellerstein*, and further illustrates the divergence between *Hellerstein* and one embodiment of the present invention. *Hellerstein* pertains to downloading software to computers. In contrast, claim 41 pertains to generating a configuration message for a host. *Hellerstein* does not disclose configuring the target machines, much less generating a configuration message that is sent to the target.

Turning to the limitations recited in claim 41, these will be discussed in detail. First, claim 41 recites both a "host protocol file" and a "host profile file" which are "associated with a type of host." Applicant's previous comments regarding "host protocol file" and "host profile file" are applicable, and will not be repeated herein.

It appears from the Office Action that the software package is alleged to be the "host protocol file" and the description of the software package is alleged to the "host profile file." Applicant notes again the distinction between a "host protocol file" and a software package, as well as a description of a software package does not provide any information about the host the

program is being executed on.

Further, the claim recites "processing the host profile file to provide a user-interface for selecting at least one service related parameter associated with a service."

Applicant notes that if the host profile is analogized to the description of the software package, then somehow it would be obvious to use the description of the software package to generate a user-interface for "selecting at least one service related parameter associated with a service."

Applicant finds the analogy to be non-applicable, and difficult to analogize. This would presume that a file containing information such as "service, role, software name, version, resource pre-requisite list, service pre-require site list" is used to somehow generate a user interface to select a service related parameter associated with a service. *Hellerstein* does not disclose "service related parameter associated with a service", so why would one be motivated to do this?

Further, *Hellerstein* teaches away from user input for downloading software. Recall that *Hellerstein* characterizes automatic, not user based downloading. ("The invention focuses on the role that target machines play in the operation of a distributed system." Col. 2, lines 15-16; "the invention is more generally applicable to any computing environment with individual computing devices in which it is desirable to provide automatic software distribution based on the role and the service associated with a software package rather than relying upon an administrator (as in the conventional push-based approach) or a user of the target machine (as in the conventional pull-based approach) to determine whether the target machine needs to be updated." Col. 4, lines 17-25).

While *Hellerstein* does disclose some limited administrator involvement, its whole purpose is to focus on automatic (machine based) processes – not facilitating user operation. Thus, it is unclear why one would be motivated to modify *Hellerstein* to focus on user inputs.

Finally, the limitation of "generated host configuration message" is alleged to be disclosed in *Hellerstein* based on the text "message may include "service name, override flag,

package binary." Applicant's prior comments regarding this aspect are references, which in summary refer to communication between the SDS and the RS, not the RS and the target system. The analogy is inappropriate to the present claim.

Finally, the claim recites "associating the host configuration message with the type of host". The Office Action alleges that this is disclosed by the following text:

> "determine[ing] if each of the end point machine has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.) Determine if a target has an appropriate version of the (correct) operation system, pre-requisites (i.e., are the required services present)."

Applicant submits that *Hellerstein* discloses the RS checking a database with the target machine's environment, and that this has nothing to do with "associating the host configuration message with the type of host." First, there is no configuration message disclosed; second, looking up information in a database is not 'associating' anything; third, the software environment of a target machine does not indicate a "type of host."

Applicant submits that claim 41 is patentable over *Hellerstein*, and that the rejection be withdrawn.

Claim 42

These claims recite a "statically created" configuration message. Applicant submits that *Hellerstein* does not distinguish nor define these limitations, and that the references "message" refers to communication from the SDS to the RS, not from the RS to a target machine. Therefore, the analogy is inappropriate and not applicable.

Claim 43

Claim 43 recites a "dynamically created" configuration message. The Office Action has

not addressed Applicant's prior rebuttal, and Applicant reiterates the comments proffered in the last response.

Further, the Examiner has not rebutted the assertion that the "message" disclosed in *Hellerstein* is not transmitted to the target machine. Applicant submits that the message is transferred to the RS.

Claim 44

Applicant notes that the Examiner has not addressed the Applicant's prior rebuttal from the last response; Applicant reiterates the response proffered in the prior response.

Applicant further notes that *Hellerstein* states that the RS performs an "inventory scan to determine the environment of the machine" by accessing a role repository database (col. 8, lines 44-57). There is no disclosure in *Hellerstein* of the host manufacturer and host model. Further, *Hellerstein's* disclosure of a database maintaining a software inventory of a target machine avoids the need to know the manufacturer and model of a machine.

Claim 45

Applicant notes that the Examiner has not addressed the Applicant's prior rebuttal from the last response; Applicant reiterates the response proffered in the prior response.

Claim 46

Applicant notes that the Examiner has not addressed the Applicant's prior rebuttal from the last response; Applicant reiterates the response proffered in the prior response.

Applicant further adds that the claim recites "a list of capabilities associated with *the type* of host." There is a distinction between "a host" and a "type of host." Applicant submits that *Hellerstein* does not disclose "types" of hosts, which can be embodied as a host manufacturer

and model thereof.

Because *Hellerstein* does not disclose "types of hosts", the claim limitation is patentable over *Hellerstein*.

Claim 47

Applicant notes that the Examiner has not addressed the Applicant's prior rebuttal from the last response and Applicant reiterates the response proffered in the prior response.

Applicant notes that the MPEP 2112 section IV, requires the examiner to provide rationale or evidence tending to show inherency. "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted)

Claim 48

Applicant notes that the Examiner has not addressed the Applicant's prior rebuttal from the last response; Applicant reiterates the response proffered in the prior response.

Applicant notes that the MPEP 2112 section IV, requires the examiner to provide rationale or evidence tending to show inherency. "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted)

Applicant submits that *Hellerstein* discloses downloading software, and does not disclose

commanding the target machine. Applicant submits further that *Hellerstein* clearly distinguishes from installing software and executing it ("Accordingly, software components including instructions or code for performing the methodologies of the invention, as described herein, may be stored in one or more of the associated memory devices (e.g., ROM, fixed or removable memory) and, when ready to be utilized, loaded in part or in whole (e.g., into RAM) and executed by a CPU." Col. 12, lines 13-18). Thus, the installation and execution are two separate aspects. The claim recites a "wherein the configuration message is an executable command on a processor in a host." While application programs comprise commands, they are not commonly referred to as "configuration commands" as used in the specification (see, e.g., par. 250).

Claims 49 and 50 (previously addressed)

Claim 51

The Office Action has combined *Hellerstein* and Lajoie for purposes of rendering obvious the claimed limitations. *Hellerstein* deals with "systems and methods for performing software distribution in such distributed computing systems." (Col. 1, lines 6-9). LaJoie pertains to an interactive program guide for set top boxes in a cable system. (Title, Abstract)

Applicant submits that while LaJoie discloses downloading software to a set top box, there is no disclose that the "a cable distribution network operatively connected to the enhanced service system at a headend of the cable distribution network capable of receiving the host software file from the enhanced service system." Specifically, that the ESS would be connected to the headend of the cable distribution network is not obvious by the mere combination of the two references.

In other words, *Hellerstein* discloses downloading an application software program from an RS to a target system (computer). The use of cable networks to connect computers is well known, but combining a cable network of LaJoie would merely result in using a cable network to distribute software to the computers – not to the set top boxes on the cable network (e.g., hosts).

Claim 52

Claim 52 has been amended to incorporate claim 53, thereby rending the rejection moot for claim 52. Applicant therefore addresses the rejection for claim 53.

Claim 53 recites the limitation "wherein the database further stores a host type associated with the host software, the host type comprising a host manufacturer identifier and a model identifier of the host manufacturer."

Applicant's prior comments pertaining to these limitations are recited. Namely, that *Hellerstein* does not disclose a "host type." *Hellerstein* discloses individual targets machines, but not types of machines. It also discloses software application description files, but these are not hosts.

Further, there is no disclosure in *Hellerstein* regarding "a host manufacturer identifier and a model identifier of the host manufacturer." Applicant submits that the Examiner's assertion that "a database with their configuration settings" does not disclose a type of host, nor 'a host manufacturer identifier and a model identifier of the host manufacturer." Configuration settings are not indicative of a host manufactures. For example, if a configuration setting on a laptop display is set for 640 by 420 pixels, what type of laptop is it? What is the manufacturer? What model? **It simply cannot be determined from the configuration settings**.

Further, Applicant submits that the statement "the configuration file identifies what type (model) of target machine is required for the software package) is conclusionary and does not indicate any support based on the disclosure of *Hellerstein*.

Consequently, Applicant submits that amended claim 52 is patentable over the prior art references.

Claim 53

Claim 53 is incorporated into claim 52 and therefore is cancelled.

Claim 54, 55, 56, and 57

Claims 54-57 are patentable for depending from claim 52, which is patentable over the prior art.

Claim 58

Claim 58 is alleged to be obvious in light of *Hellerstein* and *Ma*.

Applicant notes that claim 58 recites in part "using a cable distribution network" which is not disclosed either by *Hellerstein* and *Ma*. (See, e.g., rejection for claim 51, in which it is admitted that *Hellerstein* does not disclose "a cable distribution network…").

Consequently, Applicant submits the rejection is deficient in that it has not addressed all the limitations in the claim, and a *prima facie* case of obviousness has not been made.

Applicant is amending claim 58 to recite "the host software file containing an indication of certification for operation in the host wherein the host is associated with a specific host manufacturer and a model associated with the specific host manufacturer." (See, e.g., text of original claim 2, now incorporated into claim 1).

Applicant's prior comments regarding the lack of disclosure of these limitations with respect to *Hellerstein* and *Ma* apply as well.

CONCLUSION

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

/Karl H. Koster/

Karl H. Koster
Registration No. 50,684

Customer No. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Atlanta Office (404) 881-7000
Fax Atlanta Office (404) 881-7777